



APPLICATION NO.

09/825,400

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO.

15162/03500 1625

EXAMINER

24367 7590 SIDLEY AUSTIN LLP 717 NORTH HARWOOD SUITE 3400 DALLAS, TX 75201

FILING DATE

04/03/2001

04/05/2006

JELINEK, BRIAN J

ART UNIT PAPER NUMBER

2622 DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

FIRST NAMED INVENTOR

Mutsuhiro Yamanaka

		Application No.	Applicant(s)	
Office Action Summary		09/825,400	YAMANAKA ET AL.	
		Examiner	Art Unit	
	•	Brian Jelinek	2622	
	The MAILING DATE of this communication app	l .		
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
2a)□	 Responsive to communication(s) filed on <u>04 January 2006</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 			
Disposition of Claims				
5) □ 6) ⊠ 7) □ 8) □ Applicati 9) □ 10) ⊠	Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-16 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o on Papers The specification is objected to by the Examine The drawing(s) filed on 03 April 2001 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	wn from consideration. r election requirement. r. ⊠ accepted or b) □ objected to drawing(s) be held in abeyance. Setion is required if the drawing(s) is ol	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
2) 🔲 Notic 3) 🔲 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:		

Response to Amendment

The Examiner respectfully submits a response to the amendment received on 1/4/2006 of application no. 09/825,400 filed on 4/3/2001 in which claims 1-16 are currently pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/4/2006 has been entered.

Arguments

The Applicant's arguments have been fully considered but they are not persuasive. Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

The Applicant argues:

Claim 1 recites, inter alia, "a detector which detects abnormality disturbing said multiplex image processing when said plurality of images are being taken in said multiplex image taking mode." That is, the detectors detects the abnormalities in the midst of taking the multiple images. See also Fig. 9:

In contrast, Onuki clearly teaches that the plurality of images are analyzed and abnormalities detected after all of the images have been captured. For example, the disclosed flowcharts show that all Nsf images are captured. See steps S117-S122 in Figs. 6, 18, 35, and 40. Then the images are synthesized. Step S124. During image synthesis, blurring amounts are calculated for pairs of the multiplexed images. See S161-167 of Fig. 33, which corresponds to step S124 of Fig. 18 (see col. 41, lines 24-25). If the blurring amounts are not less than the limit, image synthesis is aborted and one of the multiplexed images is returned. See Fig. 33, step S168 and column 41, line 65 to column 42, line 8. See also, Figs. 36 and 39 for alternative embodiments of image synthesis step S124. Onuki does not provide any other teaching with respect to how or when the plurality of images are analyzed. It is respectfully submitted that Onuki fails to disclose, teach, or suggest "a detector which detects abnormality disturbing said multiplex image processing when said plurality of images are being taken in said multiplex image taking mode" as required by claim 1.

Page 3

In response, Onuki teaches that the plurality of images are analyzed and abnormalities detected after all of the images have been captured. However, Onuki also teaches "a detector which detects abnormality disturbing said multiplex image processing when said plurality of images are being taken in said multiplex image taking mode" because the multiplex image taking mode comprises all the steps from capturing the images, to detection of an abnormality, to image synthesis. As a result, the detection of an abnormality during image synthesis and following the capture of the images occurs during the multiplex image synthesis processing when the images are being taken in the multiplex image taking mode. Although the Applicant argues that "the detectors detects the abnormalities in the midst of taking the multiple images", this language is not a claim limitation, nor does the claim language distinguish the detection

of an abnormality during the image capture sequence of a plurality of images from the detection of an abnormality during camera operation in a multiplex image taking mode.

The Applicant further argues:

Claim 2 recites, inter alia, "a controller which, when said abnormality is detected by said detector, suspends processing in said multiplex image taking mode, and accepts user selection regarding image recording for said plurality of images taken." That is, according to claim 2 if an abnormality is detected, processing is aborted and the user may select which of the plurality of images are to be saved. The Office Action alleges that this is taught by the combination of Onuki and Wakui. It is respectfully submitted, however, that there is no motivation or suggestion to make the combination. Onuki discloses several embodiments of a digital camera in which a plurality of images are captured and then subjected to image synthesis. See, for example, Fig. 6, steps S117-S122 and S124. The image synthesis step returns a single image which is then recorded. See column 14, lines 50-57. If there is a problem with the image synthesis, "one of the plurality of images, not a synthesized image ... is outputted" See column 41, line 65 to column 42, line 8. Thus, Onuki teaches that a single image is saved regardless of any errors in image synthesis, and thereby teaches away from providing a user with a choice of which images to save if there is an error.

Wakui also fails to provide any suggestion or motivation to make the combination proposed in the Office Action. Taken as a whole, Wakui teaches that if it is inconvenient or time consuming to delete images from a removable IC memory card, e.g., the card has to be removed from the camera and connected to a computer, it may be desirable to capture a plurality of images to a temporary memory and then let a user selectively transfer images to the IC memory card. Column 1, lines 16-38. Wakui does not suggest any other conditions under which this feature would be useful. Therefore, Wakui cannot,

be said to suggest enabling a user to selectively save images from a plurality of images when an error has occurred while synthesizing the plurality of images. Thus, Onuki teaches away from the features of claim 2. Wakui only teaches that selectively copying image to an IC memory card is desirable when it is inconvenient to erase images from the card. It is respectfully submitted, therefore, that neither Onuki nor Wakui provide any suggestion or motivation to combine their respective teachings. No other art is cited that may provide the necessary motivation. Accordingly, there is no motivation or suggestion to make the proposed combination.

In response, the claim recites a controller which "accepts a user selection regarding image recording for said plurality of images taken". Although the Applicant argues that "if an abnormality is detected, processing is aborted and the user may select which of the plurality of images are to be saved", this limitation is not claimed. In particular, Wakui enables a user selection for said plurality of images taken because, in the event that image synthesis fails, the user may select the frame outputted for permanent storage in the removable memory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onuki (U.S. Pat. No. 6,429, 895) in view of Wakui (U.S. Pat. No. 5742339).

Regarding claim 1, Onuki discloses an image taking apparatus having a multiplex image taking mode for taking a plurality of images to be subjected to multiplex image processing by which a plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37), the image taking apparatus, comprising: a detector which detects abnormality disturbing said multiplex image processing when said plurality of images are being taken in said multiplex image taking mode (col. 23, lines 26-67; col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a controller which, when abnormality is detected by said detector, suspends processing in said multiplex image taking mode (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose that the controller accepts a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so

that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 2, Onuki discloses an image taking apparatus having a multiplex image taking mode for taking a plurality of images to be subjected to multiplex image processing by which a plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37), the image taking apparatus, comprising: a detector which detects whether or not abnormality disturbing said multiplex image processing resides in said plurality of images taken in said multiplex image taking mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a controller which, when said abnormality is detected by said detector, suspends processing in said multiplex image taking mode (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Page 8

Onuki does not disclose that the controller accepts a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 3, Onuki discloses an image taking apparatus having a multiplex image taking mode for taking a plurality of images to be subjected to multiplex image processing by which a plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37), the image taking apparatus, comprising: a detector which detects abnormality disturbing said multiplex image processing when said plurality of images are being taken in said multiplex image taking mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a display (Fig. 1, Display) which, when said abnormality is detected by said detector, indicates that a multiplex image taking is unsuccessful (col. 20, line 6; col. 20, lines 11-15; see also col. 41, line 65-col. 42, line 32).

Application/Control Number: 09/825,400

Art Unit: 2622

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 4, Onuki discloses an image taking apparatus having a multiplex image taking mode for taking a plurality of images to be subjected to multiplex image processing by which a plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37), the image taking apparatus, comprising: a detector which detects whether or not abnormality disturbing said multiplex image processing

resides in said plurality of images taken in said multiplex image taking mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a display (Fig. 1, Display) which, when said abnormality is detected by said detector, indicates that a multiplex image taking is unsuccessful (col. 20, line 6; col. 20, lines 11-15; see also col. 41, line 65-col. 42, line 32).

Page 10

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1,

lines 6-42). Regarding claim 5, Onuki discloses an image taking method, comprising: detecting abnormality disturbing multiplex image processing when a plurality of images are being taken (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6), wherein said plurality of images are subjected to said multiplex image processing to be composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37); and suspending processing in said multiplex image taking mode when said abnormality is detected (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a

controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 6, Onuki discloses an image taking method, comprising: detecting abnormality residing in a plurality of images taken by a multiplex image taking (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6), wherein said abnormality disturbs multiplex image processing of said plurality of images by which said plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37); and suspending processing in said multiplex image taking mode when said abnormality is detected (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken when said abnormality is detected. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to

preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 13, Onuki teaches a camera, comprising: a selector which selects a specific mode for taking a plurality of images to be composed into a single image among a plurality of image taking modes (col. 21, lines 26-31; col. 21, line 52-col. 22, line 32); a detector for detecting whether or not there is abnormality disturbing said composing when said plurality of images are being taken in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a controller which, when said abnormality is detected by said detector, suspends processing in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose that the controller accepts a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 14, Onuki teaches a camera, comprising: a selector which selects a specific mode for taking a plurality of images to be composed into a single image among a plurality of image taking modes (col. 21, lines 26-31; col. 21, line 52-col. 22, line 32); a detector which detects whether or not abnormality disturbing said composing resides in said plurality of images taken in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a controller which, when said abnormality is detected by said detector, suspends processing in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that

images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose that the controller accepts a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Regarding claim 15, Onuki teaches a camera, comprising: a selector which selects a specific mode for taking a plurality of images to be composed into a single image among a plurality of image taking modes (col. 21, lines 26-31; col. 21, line 52-col. 22, line 32); a detector for detecting whether or not there is abnormality disturbing said composing when said plurality of images are being taken in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a display (Fig. 1, Display) which, when

said abnormality is detected by said detector, indicates that said image taking in said specific mode is unsuccessful (col. 20, line 6; col. 20, lines 11-15; see also col. 41, line 65-col. 42, line 32).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a user selection regarding image recording for said plurality of images taken in order to enable a user to select for permanent storage the unsynthesized image from the plurality of pixel shifted images.

Regarding claim 16, Onuki teaches a camera, comprising: a selector which selects a specific mode for taking a plurality of images to be composed into a single

image among a plurality of image taking modes (col. 21, lines 26-31; col. 21, line 52-col. 22, line 32); a detector which detects whether or not abnormality disturbing said composing resides in said plurality of images taken in said specific mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6); and a display (Fig. 1, Display) which, when said abnormality is detected by said detector, indicates that said image taking in said specific mode is unsuccessful (col. 20, line 6; col. 20, lines 11-15; see also col. 41, line 65-col. 42, line 32).

Furthermore, Onuki discloses whether or not to perform pixel shifting in accordance with an image sensing mode set by a user (col. 21, lines 24-31); that images may or may not be synthesized based on the degree of blur (col. 38, lines 27-37); and if the degree of blur exceeds a threshold, a warning messages is outputted to the user and one of the plurality of pixel shifting images, rather than a synthesized image, is outputted (col. 41, line 65-col. 42, line 8).

Onuki does not disclose providing a user selection regarding image recording for said plurality of images taken. However, Wakui discloses temporarily storing captured images in a flash memory (Fig. 1B, element 20) before allowing a user to select the desired images for permanent storage to an IC card (col. 7, lines 44-46). One of ordinary skill in the art would have enabled a user to preview images and select desired images before permanently storing the desired images so that only the desired images are stored on the IC memory (col. 1, lines 6-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a

controller that accepts a user selection regarding image recording for said plurality of images taken in order to eliminate the need for deleting unwanted image data (col. 1, lines 6-42).

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onuki (U.S. Pat. No. 6,429, 895) in view of Ramirez et al. (U.S. Pat. No. 6,504,575).

Regarding claim 7, Onuki teaches an image taking apparatus having a multiplex image taking mode for taking a plurality of images to be subjected to multiplex image processing by which a plurality of images are composed into a single image (col. 22, lines 51-57; col. 20, lines 29-37), the image taking apparatus, comprising: a display having a view portion for displaying an image taken by the image taking apparatus (col. 11, lines 16-18) and an indicating portion for indicating that images are being taken in said multiplex image taking mode (DISP; col. 22, lines 38-41). Onuki does not specifically disclose an indicating portion (Fig. 1, Display) adjoining said display portion.

However, Ramirez discloses overlay bars adjoining a display portion (col. 6, lines 7-17). One of ordinary skill in the art would have provided overlay bars adjoining a display portion in order to provide the user with mode specific static status information pertaining to the particular mode (col. 6, lines 34-44). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided indicating portion (Fig. 1, Display) for indicating that images are being taken in said multiplex image taking mode adjoining said display portion in order to better convey to the user current status information.

Application/Control Number: 09/825,400

Art Unit: 2622

Regarding claim 8, Onuki teaches a camera, comprising: a selector which selects a first mode for taking a single image or a second mode for taking a plurality of images to be composed into a single image (col. 21, lines 26-31; col. 21, line 52-col. 22, line 32); a display portion for displaying an image taken by the camera (col. 11, lines 16-18); and an indicating portion (Fig. 1, Display) for providing an indication distinguishing between said first mode or said second mode (col. 22, lines 38-41). Onuki does not specifically disclose an indicating portion adjoining said display portion.

However, Ramirez discloses overlay bars adjoining a display portion (col. 6, lines 7-17). One of ordinary skill in the art would have provided overlay bars adjoining a display portion in order to provide the user with mode specific static status information pertaining to the particular mode (col. 6, lines 34-44). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided indicating portion (Fig. 1, Display) adjoining said display portion for providing an indication distinguishing between said first mode or said second mode in order to better convey to the user current status information.

Regarding claim 9, Onuki teaches the display indicates said second mode so that a user can recognize said second mode (col. 22, lines 38-41).

Regarding claim 10, Onuki teaches a monitor for displaying an image to be taken, wherein said display is disposed at a location where a user can recognize said display together with said monitor (col. 22, lines 38-41).

Regarding claim 11, Onuki teaches a detector for detecting whether or not there is abnormality disturbing said composing when images are being taken in said second

mode (col. 22, lines 60-67; col. 21, lines 24-25; Fig. 1, vibration sensors; col. 12, lines 17-23; col. 19, lines 18-25; col. 19, line 36-col. 20, line 6).

Regarding claim 12, Onuki teaches a controller which suspends processing in said second mode when said abnormality is detected by said detector (col. 22, lines 60-67; col. 21, lines 24-25; col. 19, line 65-col. 20, line 6).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (571) 272-7366. The examiner can normally be reached on M-F 9:00 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached at (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek

TUAN HO
PRIMARY EXAMINER